REPORT IN BRIEF

Canadian Agency for
Drugs and Technologies
in Health

Data Collection on Patients in Emergency Departments in Canada

Issue and Methods

Effectively monitoring emergency department (ED) overcrowding may help with intra- and inter-institutional benchmarking, as well as designing and implementing interventions to reduce overcrowding in Canadian EDs. There is a need to understand the ability of EDs and of governments to quantify ED activity and report on measures of ED overcrowding. A survey of 243 Canadian hospital ED directors was conducted (158 respondents, 65% response rate). A survey of vendors of ED information systems (EDIS); provincial and territorial governments; and the Canadian Institute for Health Information (CIHI) was also conducted.

Implications for Decision Making

- **Measures of ED overcrowding and their collection require consistency.** Inconsistent methods of acquiring, collecting, and defining data, as well as using different data elements and measures of overcrowding create a confusing picture of problems facing EDs. Measures thought to be important by those delivering ED services, such as the percentage of ED occupied by in-patients, are infrequently collected.
- **The electronic collection of relevant data to measure and address overcrowding should be considered.**

Only 39% of ED directors surveyed reported using EDIS, one way of gathering electronic ED data. As of 2005, nine (69%) provincial and territorial ministries reported collecting some form of ED data, but most (78%) obtained all or part from medical records. Alberta, Ontario, and Yukon reported having a comprehensive, jurisdictional ED database in 2005. Six jurisdictions, however, expected to change the way that they collect ED data within two years.

- **Contributions to the national data system would be valuable for policy makers.** As of 2005, Ontario and Yukon reported providing comprehensive ED data to CIHI's National Ambulatory Care Reporting System; several other provinces have individual institutions that contribute local data.
- **Electronic ED information systems are broadly available in Canada.** Seven of 11 EDIS vendors (64%) surveyed in 2005 reported that their software was in use by Canadian EDs. Most vendors provide a similar package of basic EDIS options (100% tracking and mapping functions, 91% electronic triage); however, more advanced informatics (e.g., electronic charts, discharge information, order entry) are less commonly available as part of the standard software package or are available only as add-on features.